

# SEQUENCE LISTING



<110> Accola, Molly  
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<120> CFTR Allele Detection Assays

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<160> 518

<170> PatentIn version 3.2

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<400> 71  
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 acggacgcgg agttttgttt ctgtccagga g 31

<210> 73  
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<400> 77  
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<400> 78  
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<210> 85  
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<400> 85  
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<400> 86  
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<210> 87  
 <211> 58  
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<220>  
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<400> 87  
 gccgattgac cgccattgcg agaacaattgc agaattgagat ggtgggtgaat attttcct 58

<210> 88  
 <211> 58  
 <212> DNA  
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<220>  
 <223> Synthetic

<400> 88  
 gccgattgac cgccattgtc agaacaattgc agaattgagat ggtgggtgaat attttcct 58

<210> 89  
 <211> 35  
 <212> DNA  
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<220>  
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<220>  
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<400> 89  
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<210> 90  
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 <210> 91  
 <211> 34  
 <212> DNA  
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 <223> Synthetic  
  
 <400> 91  
 gagatgctcc tgtctcctgg acagaaacaa aaat 34  
  
 <210> 92  
 <211> 33  
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 <400> 92  
 acggacgcgg agaacaatct tttaaacaga ctg 33  
  
 <210> 93  
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 cgcgccgagg gcaatctttt aaacagactg 30  
  
 <210> 94  
 <211> 71  
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 <223> Synthetic

<400> 94  
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 catctccttc t 71

<210> 95  
 <211> 70  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic

<400> 95  
 ccccaaaactc tccagtctgt ttaaaagatt gcttttttgt tctgtccagg agacaggagc 60  
 atctccttct 70

<210> 96  
 <211> 35  
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<220>  
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<220>  
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<400> 96  
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<210> 97  
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<220>  
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<220>  
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<400> 97  
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<210> 98  
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 <400> 98  
 cgcagaacaa tgcagaatga gatggtggtg aatattttcc t 41

<210> 99  
 <211> 29  
 <212> DNA  
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 <400> 99  
 cgcgccgagg ggaggatgat tcctttgat 29

<210> 100  
 <211> 33  
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 <213> Artificial Sequence  
  
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 <400> 100  
 acggacgcgg agagaggatg attcctttga tta 33

<210> 101  
 <211> 66  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 101  
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 ctgcgt 66

<210> 102  
 <211> 66  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 102  
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 ctgcgt 66



<210> 103  
<211> 33  
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<220>  
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<220>  
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<400> 103  
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33

<210> 104  
<211> 35  
<212> DNA  
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<220>  
<223> Synthetic

<220>  
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<400> 104  
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35

<210> 105  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
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<400> 105  
agaatcatag cttcctatga cccggataac aaggaggaac t

41

<210> 106  
<211> 30  
<212> DNA  
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<220>  
<223> Synthetic

<400> 106  
cgcgccgagg gctctatcgc gatttatcta

30

<210> 107  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence  
  
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 <223> Synthetic  
  
 <400> 107  
 aggccacgga cgactctatc gcgatttatc tag 33

<210> 108  
 <211> 68  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
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 <400> 108  
 atgcctagat aaatcgcgat agagcgttcc tccttgttat ccgggtcata ggaagctatg 60  
 attcttct 68

<210> 109  
 <211> 68  
 <212> DNA  
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 <223> Synthetic  
  
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 attcttct 68

<210> 110  
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 <400> 110  
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<210> 111  
 <211> 35  
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 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 111  
 tcttcggcct tttggccgag agacgtccgt ggcct 35  
  
 <210> 112  
 <211> 32  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 112  
 tttggttgctg ctgtggctcc ttggaaagtg at 32  
  
 <210> 113  
 <211> 32  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 113  
 aggccacgga cggtattcca tgcctattg tg 32  
  
 <210> 114  
 <211> 32  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 114  
 acggacgcgg agatattcca tgcctattg tg 32  
  
 <210> 115  
 <211> 56  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic

<400> 115  
tctacacaat aggacatgga atactcactt tccaaggagc cacagcacia ccaaat 56

<210> 116  
<211> 56  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 116  
tctacacaat aggacatgga atattcactt tccaaggagc cacagcacia ccaaat 56

<210> 117  
<211> 35  
<212> DNA  
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<220>  
<223> Synthetic

<220>  
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<400> 117  
tcttcggcct tttggccgag agacgtccgt ggcct 35

<210> 118  
<211> 35  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic

<220>  
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<400> 118  
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<210> 119  
<211> 43  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 119  
ccttcggcga tgttttttct ggagatttat gttctatgga att 43

<210> 120  
 <211> 38  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 120  
 aggccacgga cgctttttat atttaggggt aaggatct 38  
  
 <210> 121  
 <211> 37  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 121  
 acggcgcgg agctttatat ttaggggtaa ggatctc 37  
  
 <210> 122  
 <211> 77  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 122  
 acaaatgaga tccttacccc taaatataaa aagattccat agaacataaa tctccagaaa 60  
 aaacatcgcc gaagggc 77  
  
 <210> 123  
 <211> 75  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 123  
 acaaatgaga tccttacccc taaatataaa gattccatag aacataaatc tccagaaaaa 60  
 acatcgccga agggc 75  
  
 <210> 124  
 <211> 35  
 <212> DNA  
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 <220>  
 <223> Synthetic

<220>  
 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 124  
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 <210> 125  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <220>  
 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 125  
 tctagccggt tttccggctg agactccgcg tccgt 35  
  
 <210> 126  
 <211> 47  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 126  
 tgcatgtac catgaataga acatttcctt tcagggtgtc ttactct 47  
  
 <210> 127  
 <211> 32  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 127  
 cgcgccgagg gccattttaa tactgcaaca ga 32  
  
 <210> 128  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 128  
 acggacgcgg agaccatttt aatactgcaa cag 33

<210> 129  
 <211> 72  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 129  
 ccatctgttg cagtattaaa atggcgagta agacaccctg aaaggaaatg ttctattcat 60  
 ggtacaatgc at 72  
  
 <210> 130  
 <211> 72  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 130  
 ccatctgttg cagtattaaa atggcgagta agacaccctg aaaggaaatg ttctattcat 60  
 ggtacaatgc at 72  
  
 <210> 131  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <220>  
 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 131  
 tcttcggcct tttggccgag agacctcggc gcg 33  
  
 <210> 132  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
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 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 132  
 tctagccggt tttccggctg agactccgcg tccgt 35

<210> 133  
 <211> 34  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 133  
 gctcacctgt ggtatcactc caaaggcttt ccta 34

<210> 134  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 134  
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<210> 135  
 <211> 30  
 <212> DNA  
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 <220>  
 <223> Synthetic  
  
 <400> 135  
 cgcgccgagg tcactgttgc aaagttattg 30

<210> 136  
 <211> 60  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 136  
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<210> 137  
 <211> 60  
 <212> DNA  
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 <220>  
 <223> Synthetic  
  
 <400> 137  
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<210> 138  
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 <220>  
 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 138  
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<210> 139  
 <211> 33  
 <212> DNA  
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 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 139  
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<210> 140  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 140  
 aataggacat ctccaagttt gcagagaaag acaatatagt tcttc 45

<210> 141  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 141  
 aggccacgga cgggagaagg tggaatcac 29

<210> 142  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 142  
 cgcgccgagg tgagaagggtg gaatcaca 28  
  
 <210> 143  
 <211> 67  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 143  
 tcagtgtgat tccaccttct ccaagaacta tattgtcttt ctctgcaaac ttggagatgt 60  
 cctatattt 67  
  
 <210> 144  
 <211> 67  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 144  
 tcagtgtgat tccaccttct caaagaacta tattgtcttt ctctgcaaac ttggagatgt 60  
 cctatattt 67  
  
 <210> 145  
 <211> 35  
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 <223> Synthetic  
  
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 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 145  
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<210> 146  
 <211> 33  
 <212> DNA  
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 <221> misc\_feature  
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 <210> 147  
 <211> 49  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 147  
 gcaattttgg atgaccttct gcctcttacc atatttgact tcatccagt 49  
  
 <210> 148  
 <211> 34  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 148  
 aggccacgga cggatatgtaa aaataagtac cggt 34  
  
 <210> 149  
 <211> 34  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 149  
 cgcgccgagg atatgtaaaa ataagtaccg ttaa 34  
  
 <210> 150  
 <211> 79  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic

<400> 150  
 atactttaacg gtactttatctt ttacatacct ggatgaagtc aaatatggta agaggcagaa 60  
 ggatcatccaa aattgctat 79

<210> 151  
 <211> 79  
 <212> DNA  
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<220>  
 <223> Synthetic

<400> 151  
 atactttaacg gtactttatctt ttacatatct ggatgaagtc aaatatggta agaggcagaa 60  
 ggatcatccaa aattgctat 79

<210> 152  
 <211> 35  
 <212> DNA  
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<220>  
 <223> Synthetic

<220>  
 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.

<400> 152  
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<210> 153  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic

<220>  
 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.

<400> 153  
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<210> 154  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 154  
 cctacaccca gccatttttg gccttcatca caa 33

<210> 155  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 155  
 cgcgccgagg ttggaatgca gatgagaata 30

<210> 156  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 156  
 acggacgcgg agctggaatg cagatgagaa 30

<210> 157  
 <211> 59  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 157  
 tagctattct catctgcatt ccaatgtgat gaaggccaaa aatggctggg tgtaggagt 59

<210> 158  
 <211> 59  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 158  
 tagctattct catctgcatt ccagtgtgat gaaggccaaa aatggctggg tgtaggagt 59

<210> 159  
 <211> 33  
 <212> DNA  
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 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 159  
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 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 160  
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 <210> 161  
 <211> 61  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 161  
 gcctttccag ttgtataatt tataacaata gtgcctaaaa gattaaatca ataggtagat 60  
 t 61  
  
 <210> 162  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 162  
 cgcgccgagg acttcatcaa atttgttcag 30

<210> 163  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 163  
 aggccacgga cgaattcatc aaatttggtc agg 33

<210> 164  
 <211> 88  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 164  
 aacaacctga acaaatttga tgaagtatgt acctattgat ttaatctttt aggcactatt 60  
 gttataaatt atacaactgg aaaggcgt 88

<210> 165  
 <211> 88  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 165  
 aacaacctga acaaatttga tgaattatgt acctattgat ttaatctttt aggcactatt 60  
 gttataaatt atacaactgg aaaggcgt 88

<210> 166  
 <211> 35  
 <212> DNA  
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 <220>  
 <223> Synthetic  
  
 <220>  
 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 166  
 tctagccggt tttccggctg agacgtccgt ggcct 35

<210> 167  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <220>  
 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 167  
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 <210> 168  
 <211> 38  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 168  
 tcaccttgct aaagaaattc ttgctcggtg acctccaa 38  
  
 <210> 169  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 169  
 acggacgcgg agctcagtg gattccacc 29  
  
 <210> 170  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 170  
 cgcgccgagg ttcagtgga ttccacc 27



<210> 171  
 <211> 61  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
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<210> 175  
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 <223> Synthetic  
  
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<210> 182  
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<400> 182  
gatctggatt tctccttcag tggtcagtag tctcat 36

<210> 183  
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<400> 183  
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<210> 184  
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<400> 184  
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 agatcgatgg 70

<210> 186  
 <211> 71  
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<220>  
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<400> 186  
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<210> 187  
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 <400> 190  
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 <210> 191  
 <211> 27  
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<400> 192  
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 gaat 64

<210> 193  
 <211> 64  
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<400> 193  
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 gaat 64

<210> 194  
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<210> 196  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence  
  
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 <223> Synthetic  
  
 <400> 196  
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<210> 197  
 <211> 30  
 <212> DNA  
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 <400> 197  
 aggccacgga cgagatttga acactgcttg 30

<210> 198  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence  
  
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 <223> Synthetic  
  
 <400> 198  
 cgcgccgagg ggatttgaac actgcttg 28

<210> 199  
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 <400> 199  
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<210> 200  
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<210> 201
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33

<210> 202
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<220>
<223> Synthetic

<220>
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<210> 203
<211> 50
<212> DNA
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<220>
<223> Synthetic

<400> 203
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50

<210> 204
<211> 28
<212> DNA
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<220>
<223> Synthetic

<400> 204
cgcgccgagg ctgatccagt tcttcccv
28

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<210> 205  
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 <211> 73  
 <212> DNA  
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 <223> Synthetic  
  
 <400> 206  
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 aacactgaag gag 73  
  
 <210> 207  
 <211> 72  
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 <223> Synthetic  
  
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 aactgaagg ag 72  
  
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<210> 209  
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 <211> 31  
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 <211> 34  
 <212> DNA  
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 <400> 212  
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 <223> Synthetic  
  
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<210> 215  
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<210> 216  
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 <223> The residue at this position is linked to a Z28 quencher.  
  
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 <223> Synthetic  
  
 <400> 217  
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<210> 218  
 <211> 29  
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 <400> 218  
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<210> 219  
 <211> 32  
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 <400> 219  
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<210> 220  
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 <211> 56  
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<400> 223  
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<400> 224  
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<210> 225  
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<400> 225  
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 ggtctagcaa gct 73  
  
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 ggtctagcaa gct 73  
  
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<400> 231  
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<400> 232  
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<210> 233  
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<220>  
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<400> 233  
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<210> 234  
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 <211> 58  
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 <223> Synthetic  
  
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<210> 236  
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 <222> (3)..(3)  
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<210> 237  
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 <211> 38  
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 <223> Synthetic  
  
 <400> 238  
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<210> 239  
 <211> 28  
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 <400> 239  
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<210> 240  
 <211> 27  
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 <220>  
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 <400> 240  
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<210> 241  
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 <223> Synthetic  
  
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<210> 242  
 <211> 61  
 <212> DNA  
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 <220>  
 <223> Synthetic  
  
 <400> 242  
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 t 61

<210> 243  
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<212> DNA  
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<220>  
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<211> 35  
<212> DNA  
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<223> Synthetic

<220>  
<221> misc\_feature  
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<400> 244  
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<211> 47  
<212> DNA  
<213> Artificial Sequence

<220>  
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<400> 245  
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<210> 246  
<211> 31  
<212> DNA  
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<400> 246  
cgcgccgagg ttggtgtttc ctatgatgaa t

31

<210> 247  
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 <400> 247  
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 <211> 73  
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 <400> 248  
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 aggaaaaactg agt 73  
  
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 <211> 73  
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 aggaaaaactg agt 73  
  
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<210> 251  
 <211> 35  
 <212> DNA  
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 <221> misc\_feature  
 <222> (3)..(3)  
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 <400> 251  
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 <211> 43  
 <212> DNA  
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 <220>  
 <223> Synthetic  
  
 <400> 252  
 ccacaaagct ctgaatttac atactgccaa ctggttcttg tat 43  
  
 <210> 253  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 253  
 cgcgccgagg cctgtcaaca ctgcg 25  
  
 <210> 254  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 254  
 aggccacgga cgactgtcaa cactgcg 27

<210> 255  
 <211> 64  
 <212> DNA  
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 <220>  
 <223> Synthetic  
  
 <400> 255  
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 gaat 64  
  
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 <211> 64  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 256  
 ccagcgcagt gttgacagtt acaagaacca gttggcagta tgtaaattca gagctttgtg 60  
 gaat 64  
  
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 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 257  
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 <213> Artificial Sequence  
  
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 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 258  
 tctagccggt tttccggctg agacgtccgt ggcct 35

<210> 259  
 <211> 43  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 259  
 agttattcac cttgctaaag aaattcttgc tcgttgacct cct 43  
  
 <210> 260  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
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 <223> Synthetic  
  
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 aggccacgga cgactcagtg tgattccacc 30  
  
 <210> 261  
 <211> 28  
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 <213> Artificial Sequence  
  
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 <223> Synthetic  
  
 <400> 261  
 cgcgccgagg cctcagtggtg attccacv 28  
  
 <210> 262  
 <211> 66  
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 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 262  
 gaaggtggaa tcacactgag tggaggtcaa cgagcaagaa tttctttagc aaggtgaata 60  
 actaat 66  
  
 <210> 263  
 <211> 66  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic

<400> 263  
gaaggtggaa tcacactgag gggaggtcaa cgagcaagaa tttcttttagc aaggtgaata 60  
actaat 66

<210> 264  
<211> 35  
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<220>  
<223> Synthetic

<220>  
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<400> 264  
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<210> 265  
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<220>  
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<210> 266  
<211> 51  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 266  
catgctttga tgacgcttct gtatctatat tcatcatagg aaacaccaaa t 51

<210> 267  
<211> 34  
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<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 267  
 acggacgcgg aggatgatat tttctttaat ggtg 34

<210> 268  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic

<400> 268  
 aggccacgga cggatatttt ctttaatggt gcc 33

<210> 269  
 <211> 82  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic

<400> 269  
 atgcctggca ccattaaaga aaatatcatc tttggtgttt cctatgatga atatagatac 60  
 agaagcgtca tcaaagcatg cc 82

<210> 270  
 <211> 79  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic

<400> 270  
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 agcgtcatca aagcatgcc 79

<210> 271  
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<220>  
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<210> 272  
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 cgcgccgagg gttttttaaca gggatttggg 30  
  
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 <211> 31  
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 <213> Artificial Sequence  
  
 <220>  
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 <400> 274  
 cgcgccgagg gtttttttaa cagggatttg g 31  
  
 <210> 275  
 <211> 36  
 <212> DNA  
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 <223> Synthetic  
  
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 <223> 2' O-methyl  
  
 <220>  
 <221> misc\_feature  
 <222> (12)..(12)  
 <223> n is a, c, g, or t

<400> 275  
cgcgccgagg gntttttttt accagggatt tgggga 36

<210> 276  
<211> 38  
<212> DNA  
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<220>  
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<400> 276  
ctcatctttt atttttgatg tgtgtgtgtg tgtgtgta 38

<210> 277  
<211> 40  
<212> DNA  
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<220>  
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<400> 277  
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<210> 278  
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<220>  
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<400> 278  
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<210> 279  
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<220>  
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<400> 279  
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<210> 280  
<211> 36  
<212> DNA  
<213> Artificial Sequence

<220>  
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<400> 280  
ctcatctttt atttttgatg tgtgtgtgtg tgtgta 36

<210> 281  
<211> 33  
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<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
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<400> 281  
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<210> 282  
<211> 40  
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<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 282  
gtgtcctcac aataaaagaga aggcataagc ctatgcctaa 40

<210> 283  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 283  
acggacgcgg aggataaatc gcgatagagc 30

<210> 284  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 284  
aggccacgga cggttaaatc gcgatagag 29

<210> 285  
 <211> 65  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 285  
 ggaacgctct atcgcgattt atctaggcat aggcttatgc cttctcttta ttgtgaggac 60  
 actgt 65  
  
 <210> 286  
 <211> 65  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 286  
 ggaacgctct atcgcgattt aactaggcat aggcttatgc cttctcttta ttgtgaggac 60  
 actgt 65  
  
 <210> 287  
 <211> 35  
 <212> DNA  
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 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 287  
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 <210> 288  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <220>  
 <221> misc\_feature  
 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.  
  
 <400> 288  
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<210> 289  
 <211> 54  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 289  
 gactctcctt ttggatacct agatgtttta acagaaaaag aaatatttga aagt 54  
  
 <210> 290  
 <211> 35  
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 <223> Synthetic  
  
 <400> 290  
 acggacgcgg aggtatgttc tttgaatacc ttact 35  
  
 <210> 291  
 <211> 34  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 291  
 cgcgccgagg atatgttctt tgaatacctt actt 34  
  
 <210> 292  
 <211> 82  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 292  
 agcattataa gtaaggtatt caaagaacat acctttcaaa tatttctttt tctgttaaaa 60  
 catctaggtat tccaaaagga gt 82  
  
 <210> 293  
 <211> 82  
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 <220>  
 <223> Synthetic

<400> 293  
 agcattataa gtaagggtatt caaagaacat atctttcaaa tttttctttt tctgttaaaa 60  
 catctaggta tccaaaagga gt 82

<210> 294  
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<220>  
 <223> Synthetic

<220>  
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 <223> The residue at this position is linked to a Z28 quencher.

<400> 294  
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<210> 295  
 <211> 33  
 <212> DNA  
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<220>  
 <223> Synthetic

<220>  
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 <222> (3)..(3)  
 <223> The residue at this position is linked to a Z28 quencher.

<400> 295  
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<210> 296  
 <211> 32  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic

<400> 296  
 tttggttgctg ctgtggctcc ttggaaagtg at 32

<210> 297  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic

<400> 297  
 cgcgccgagg atattccatg tcctattgtg 30

<210> 298  
 <211> 58  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic

<400> 298  
 caatctacac aataggacat ggaatattca ctttccaagg agccacagca caaccaaa 58

<210> 299  
 <211> 40  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic

<400> 299  
 gtttaccttc tgttggcatg tcaatgaact taaagactct 40

<210> 300  
 <211> 24  
 <212> DNA  
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<220>  
 <223> Synthetic

<400> 300  
 cgcgccgagg agctcacaga tcgc 24

<210> 301  
 <211> 59  
 <212> DNA  
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<220>  
 <223> Synthetic

<400> 301  
 tcagatgcga tctgtgagct gagtctttaa gttcattgac atgccaacag aaggtaaac 59

<210> 302  
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<220>  
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<400> 302  
cagggaaatt gccgagtgac cgccatgt 28

<210> 303  
<211> 27  
<212> DNA  
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<220>  
<223> Synthetic

<400> 303  
acggacgcgg agggcagaac aatgcag 27

<210> 304  
<211> 50  
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<220>  
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<400> 304  
ctcattctgc attgttctgc ccatggcggt cactcggcaa tttccctggg 50

<210> 305  
<211> 54  
<212> DNA  
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<220>  
<223> Synthetic

<400> 305  
gactctcctt ttggatacct agatgtttta acagaaaaag aaatatttga aagt 54

<210> 306  
<211> 36  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic

<400> 306  
cgcgccgagg atatgttctt tgaatacctt acttat 36

<210> 307  
<211> 79  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic



<400> 307  
 ataagtaagg tattcaaaga acatatcttt caaatatttc tttttctgtt aaaacatcta 60  
 ggtatccaaa aggagagtc 79

<210> 308  
 <211> 38  
 <212> DNA  
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<220>  
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<400> 308  
 ccccaaaactc tccagtctgt ttaaaagatt attttttc 38

<210> 309  
 <211> 28  
 <212> DNA  
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<220>  
 <223> Synthetic

<400> 309  
 cgcgccgagg gtttctgtcc aggagaca 28

<210> 310  
 <211> 47  
 <212> DNA  
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<220>  
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<400> 310  
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<210> 311  
 <211> 32  
 <212> DNA  
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<220>  
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<400> 311  
 cgcgccgagg agatattttc tttaatgggtg cc 32

<210> 312  
 <211> 77  
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 <223> Synthetic  
  
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 gcctggcacc attaaagaaa atatctttgg tgtttcctat gatgaatata gatacagaag 60  
 cgtcacaaa gcatgcc 77

<210> 313  
 <211> 41  
 <212> DNA  
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 <220>  
 <223> Synthetic  
  
 <400> 313  
 gcccttcggc gatgtttttt ctggagattt atgttctatg t 41

<210> 314  
 <211> 37  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 314  
 acggacgcgg agaaatcttt ttatathtag gggtaag 37

<210> 315  
 <211> 74  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 315  
 agatccttac ccctaaatat aaaaagattt catagaacat aaatctccag aaaaaacatc 60  
 gccgaagggc atta 74

<210> 316  
 <211> 39  
 <212> DNA  
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 <220>  
 <223> Synthetic  
  
 <400> 316  
 aatcatagct tcctatgacc cggataacaa ggaggaact 39

<210> 317  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
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 <223> Synthetic  
  
 <400> 317  
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 <210> 318  
 <211> 63  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 318  
 atgcctagat aaatcgcgat agagtgttcc tccttgttat ccgggtcata ggaagctatg 60  
 att 63  
  
 <210> 319  
 <211> 53  
 <212> DNA  
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 <220>  
 <223> Synthetic  
  
 <400> 319  
 catgaatgac atttacagca aatgcttgct agaccaataa ttagttattc act 53  
  
 <210> 320  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 320  
 acggacgcgg aggttgctaa agaaattctt gct 33  
  
 <210> 321  
 <211> 83  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic

<400> 321  
 caacgagcaa gaatttcttt agcaacgtga ataactaatt attggtctag caagcatttg 60  
 ctgtaaatgt cattcatgta aaa 83

<210> 322  
 <211> 49  
 <212> DNA  
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<220>  
 <223> Synthetic

<400> 322  
 gcaattttgg atgaccttct gcctcttacc atatttgact tcatccagt 49

<210> 323  
 <211> 34  
 <212> DNA  
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<220>  
 <223> Synthetic

<400> 323  
 cgcgccgagg atatgtaaaa ataagtaccg ttaa 34

<210> 324  
 <211> 86  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic

<400> 324  
 agacatactt aacggtactt attttttacat atctggatga agtcaaatat ggtaagaggc 60  
 agaagggtcat ccaaaaattgc tatatc 86

<210> 325  
 <211> 36  
 <212> DNA  
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<220>  
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<400> 325  
 gagagttggc cattcttgta tggtttggtt gacttt 36

<210> 326  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 326  
 cgcgccgagg gtaggtttac cttctgttgg 30

<210> 327  
 <211> 59  
 <212> DNA  
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 <220>  
 <223> Synthetic  
  
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 catgccaaca gaaggtaaac ctacaagtca accaaaccat acaagaatgg ccaactctc 59

<210> 328  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 328  
 cctgaaagat attaatctca agatagaaag aggacagttg ttggt 45

<210> 329  
 <211> 27  
 <212> DNA  
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 <220>  
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 <400> 329  
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<210> 330  
 <211> 63  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
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 agg 63

<210> 331  
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 <212> DNA  
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 <223> Synthetic  
  
 <400> 331  
 agtgcacatagg gaagcacaga taaaaacacc acat 34  
  
 <210> 332  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 332  
 cgcgccgagg agaaccctga gaagaagaa 29  
  
 <210> 333  
 <211> 56  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 333  
 agccttcttc ttctcagggt tcttggtgtg tttttatctg tgcttccta tgcact 56  
  
 <210> 334  
 <211> 53  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 334  
 gcagagaaag acaatatagt tcttgagaa ggtggaatca cactgagtgg agt 53  
  
 <210> 335  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 335  
 cgcgccgagg atcaacgagc aagaatttct 30

<210> 336  
 <211> 86  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
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 actatattgt ctttctctgc aaactt 86

<210> 337  
 <211> 39  
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 <220>  
 <223> Synthetic  
  
 <400> 337  
 aaatcaaact aaacatagct attctcatct gcattccat 39

<210> 338  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
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 <400> 338  
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<210> 339  
 <211> 60  
 <212> DNA  
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 <220>  
 <223> Synthetic  
  
 <400> 339  
 ccatttttgg ccttcatcac actggaatgc agatgagaat agctatgttt agtttgattt 60

<210> 340  
 <211> 40  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic  
  
 <400> 340  
 ccatatttct tgatcactcc actgttcata gggatccaat 40

<210> 341  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence  
  
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 <223> Synthetic  
  
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 cgcgccgagg ctttttttcta aatgttccag aaaaa 35  
  
 <210> 342  
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 <212> DNA  
 <213> Artificial Sequence  
  
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 <223> Synthetic  
  
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 atttattttt tctggaacat ttagaaaaaa gttggatccc tatgaacagt ggagtgatca 60  
 agaaatatgg aaag 74  
  
 <210> 343  
 <211> 61  
 <212> DNA  
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 <223> Synthetic  
  
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 gcctttccag ttgtataatt tataacaata gtgcctaaaa gattaaatca ataggtacat 60  
 t 61  
  
 <210> 344  
 <211> 32  
 <212> DNA  
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 <220>  
 <223> Synthetic  
  
 <400> 344  
 cgcgccgagg aattcatcaa atttggttcag gt 32  
  
 <210> 345  
 <211> 82  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
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<400> 345  
 acctgaacaa atttgatgaa ttatgtacct attgatttaa tcttttaggc actattgtta 60  
 taaattatac aactggaaag gc 82

<210> 346  
 <211> 63  
 <212> DNA  
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<220>  
 <223> Synthetic

<400> 346  
 gcctttcaaa ttcagattga gcatactaaa agtgactctc taattttcta tttttggtaa 60  
 tat 63

<210> 347  
 <211> 28  
 <212> DNA  
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<220>  
 <223> Synthetic

<400> 347  
 cgcgccgagg agacatctcc aagtttgc 28

<210> 348  
 <211> 89  
 <212> DNA  
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<220>  
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<400> 348  
 ctctgcaaac ttggagatgt cttattacca aaaatagaaa attagagagt cacttttagt 60  
 atgctcaatc tgaatttgaa aggcacatc 89

<210> 349  
 <211> 34  
 <212> DNA  
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<220>  
 <223> Synthetic

<400> 349  
 gctcacctgt ggtatcactc caaaggcttt ccta 34

<210> 350  
 <211> 30  
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